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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,373	08/21/2003	Craig D. Tipton	3202R	7486
26645 7590 01/08/2007 THE LUBRIZOL CORPORATION ATTN: DOCKET CLERK, PATENT DEPT. 29400 LAKELAND BLVD. WICKLIFFE, OH 44092			EXAMINER RONESI, VICKEY M	
			ART UNIT	PAPER NUMBER
			1714	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/645,373

Applicant(s)

TIPTON ET AL.

Examiner

Vickey Ronesi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. All outstanding specification and claim objections and 35 USC 112, 2nd paragraph rejections are withdrawn in light of applicant's amendment filed 10/23/2006
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 10/23/2006. In particular, claim 27 is new. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 103

4. Claims 1-7, 11-16, and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US 4,136,043).

With respect to claims 1-7, 11-16, and 20-26, the rejection is adequately set forth in paragraph 7 of Office action mailed 4/26/2006 and is incorporated here by reference.

With respect to new claim 27, the multifunctional dispersants is prepared by heating the mixture at a temperature above 100°C in a lubricant (abstract; col. 7, lines 28-31; col. 9, lines 18-37). While the dispersant is first reacted with the boron or phosphorus compound and then reacted with the DMTD, the present claim is open to this stepwise procedure given that only a step of "heating together" is recited which does not exclude heating together of a preformed dispersant and boron or phosphorus compound with DMTD.

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5. Claims 8, 9, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US 4,136,043) in view of Le Suer '936 (US 4,087,936).

The rejection is adequately set forth in paragraph 8 of Office action mailed 4/26/2006 and is incorporated here by reference.

6. Claims 10 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US 4,136,043) in view of Le Suer (US 3,502,677).

Response to Arguments

7. Applicant's arguments filed on 10/23/2006 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that there is no motivation in Davis to choose a dispersant treated with boron or phosphorus compounds over the other disclosed dispersants with the advantages of the present invention; (B) that boric acid is typically not used in a lubricant formulation; and (C) that the 37 CFR 1.132 declaration of Dr. Tipton shows the advantages (e.g., treat rate) had by using the presently claimed multifunctional dispersant.

With respect to argument (A), given that Davis teaches the presently claimed multifunctional dispersant, it is clear that one of ordinary skill in the art would be motivated to select it as being a suitable dispersant. Absent a showing of unexpected or surprising results for a dispersant treated with phosphorus or boron which is commensurate in scope with the claimed invention, it is considered that selecting any of the dispersants of Davis, including those presently claimed, are *prima facie* obvious. Case law holds that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*,

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713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983). Furthermore, case law holds that evidence of superior properties in one species insufficient to establish the nonobviousness of a subgenus containing hundreds of compounds). *In re Greenfield*, 571 F.2d 1185, 1189, 197 USPQ 227, 230 (CCPA 1978).

With respect to argument (B), boric acid is the exemplified boron compound of the lubricant formulation of Le Seur '936 and can therefore clearly be used in lubricant formulations.

With respect to argument (C), the declaration makes comparisons between a comparative dispersant (Formulation 1) prepared by reacting nitrogen-containing dispersant and DMTD and inventive dispersants (Formulations 2 and 3) prepared by reacting nitrogen-containing dispersant, DMTD, and boric acid or phosphorous acid, respectively. The data is not commensurate in scope with the claimed invention which is open to any boron or phosphorus compound and to any dispersant. Furthermore, a multifunctional dispersant with phosphorus or boron is provided for by the prior art and it is not unexpected or surprising that less boron or phosphorus, respectively, is needed to obtain a particular amount of boron or phosphorus (as shown by the declaration) because it is already reacted with the dispersant and not a stand-alone additive. Additionally, examples are not proper side-by-side examples given the addition of a heavier boron compound (i.e., tri-C8 alkylborate) rather than boric acid to Formulations 1 and 3. Therefore, criticality cannot be established for the use of boric acid in Formulation 2. Finally, no criticality is clearly established for the use of phosphorous acid in Formulation 3 given that the difference between 4.827 % (Formulation 1) and 4.75 % (Formulation 3) appears to be too close and would fall within experimental error.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

1/3/2007

Vickey Ronesi



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